chanhvinh.com

Product data sheet




# WTT2SL-2N1192

## PowerProx

**MULTITASK PHOTOELECTRIC SENSORS**

SICK
Sensor Intelligence.

chanhvinh.com

# WTT2SL-2N1192 | PowerProx

MULTITASK PHOTOELECTRIC SENSORS



Illustration may differ

## Ordering information

| Type | Part no. |
|---|---|
| WTT2SL-2N1192 | 1085601 |

Other models and accessories → www.sick.com/PowerProx

## Detailed technical data

### Features

| | |
|---|---|
| **Functional principle** | Photoelectric proximity sensor |
| **Functional principle detail** | Background suppression, Optical time-of-flight |
| **Dimensions (W x H x D)** | 7.7 mm x 27.5 mm x 13.5 mm |
| **Housing design (light emission)** | Rectangular |
| **Sensing range max.** | 50 mm ... 800 mm [1] |
| **Sensing range** | 50 mm ... 800 mm [1] |
| **Type of light** | Infrared light |
| **Light source** | Laser [2] |
| **Light spot size (distance)** | Ø 10 mm (300 mm) |
| **Wave length** | 940 nm |
| **Laser class** | 1 |
| **Adjustment** | Single teach-in button [3] |
| **Special applications** | Detecting small objects |

[1] Object with 6 ... 90% remission (based on standard white, DIN 5033).

[2] Average service life: 50,000 h at $T_U$ = +25 °C.

[3] Teach-Offset 15 mm.

chanhvinh.com



## Mechanics/electronics

| | |
|---|---|
| **Supply voltage $U_B$** | 10 V DC ... 30 V DC [1] |
| **Ripple** | < 5 $V_{pp}$ [2] |
| **Current consumption** | 20 mA [3] |
| **Switching output** | NPN [4] |
| **Switching mode** | Light/dark switching |
| **Output current $I_{max.}$** | ≤ 50 mA |
| **Response time** | Typ. 90 ms [5] |
| **Switching frequency** | 5 Hz [6] |
| **Analog output** | - |
| **Connection type** | Cable, 4-wire, 2 m [7] |
| **Cable material** | PVC |
| **Cable diameter** | Ø 3 mm |
| **Circuit protection** | A [8]<br>B [9]<br>D [10] |
| **Protection class** | III |
| **Housing material** | Plastic, MABS, ABS |
| **Optics material** | Plastic, PMMA |
| **Enclosure rating** | IP67 |
| **Ambient operating temperature** | –25 °C ... +50 °C |
| **Ambient temperature, storage** | –40 °C ... +75 °C |
| **UL File No.** | E181493 |

[1] Limit values. Operated in short-circuit protected network: max. 8 A.
[2] May not exceed or fall below $U_V$ tolerances.
[3] Without load.
[4] Off-state current $I_R$ ≤ 0,6 mA.
[5] Jitter +- 20 ms.
[6] With light/dark ratio 1:1.
[7] Do not bend below 0 °C.
[8] A = $V_S$ connections reverse-polarity protected.
[9] B = output reverse-polarity protected.
[10] D = outputs overcurrent and short-circuit protected.

## Safety-related parameters

| | |
|---|---|
| **$MTTF_D$** | 925 years |
| **$DC_{avg}$** | 0 % |

## Classifications

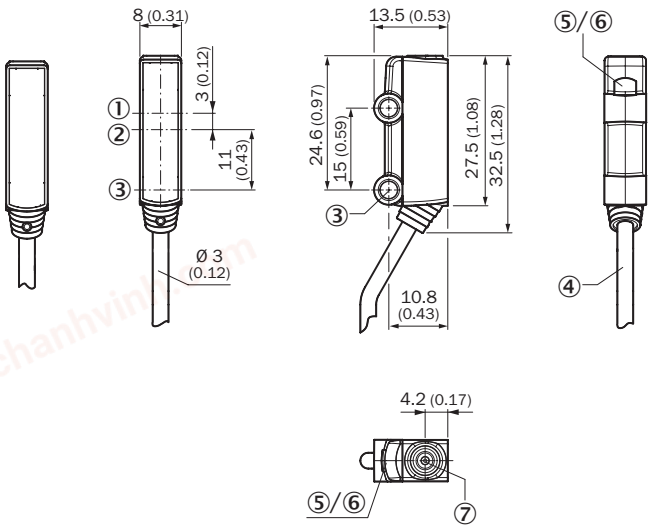
| | |
|---|---|
| **eCl@ss 5.0** | 27270904 |
| **eCl@ss 5.1.4** | 27270904 |
| **eCl@ss 6.0** | 27270904 |
| **eCl@ss 6.2** | 27270904 |
| **eCl@ss 7.0** | 27270904 |
| **eCl@ss 8.0** | 27270904 |

chanhvinh.com



| | |
|---|---|
| **eCl@ss 8.1** | 27270904 |
| **eCl@ss 9.0** | 27270904 |
| **eCl@ss 10.0** | 27270904 |
| **eCl@ss 11.0** | 27270904 |
| **eCl@ss 12.0** | 27270903 |
| **ETIM 5.0** | EC002719 |
| **ETIM 6.0** | EC002719 |
| **ETIM 7.0** | EC002719 |
| **ETIM 8.0** | EC002719 |
| **UNSPSC 16.0901** | 39121528 |

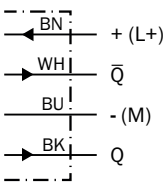
## Dimensional drawing (Dimensions in mm (inch))




① Optical axis, receiver
② Optical axis, sender
③ Mounting hole, Ø 3.2 mm
④ Connection cable
⑤ LED indicator green: Supply voltage active
⑥ LED indicator yellow: Status of received light beam
⑦ Single teach-in button

## Connection diagram

Cd-095

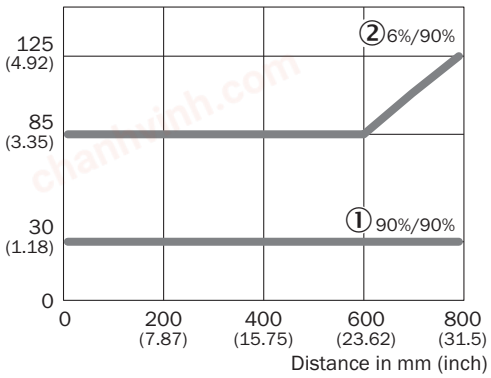


chanhvinh.com



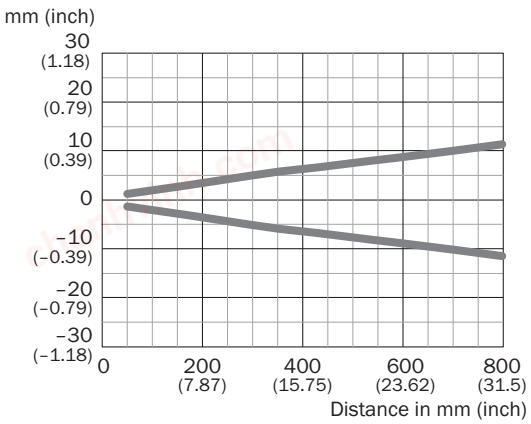
## Characteristic curve

Min. distance from object to background in mm (inch)




① Sensing range on white, 90% remission factor
② Sensing range on black, 6% remission factor

## Light spot size




## Recommended accessories

Other models and accessories ➜ www.sick.com/PowerProx

| | Brief description | Type | Part no. |
|---|---|---|---|
| Mounting brackets and plates | | | |
|  | Mounting bracket for wall mounting, steel, zinc coated, without mounting hardware | BEF-W2S-B | 4034749 |
| Plug connectors and cables | | | |
|  | Head A: male connector, M12, 4-pin, straight<br>Cable: unshielded | STE-1204-G | 6009932 |

chanhvinh.com



# SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

**For us, that is “Sensor Intelligence.”**

# WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com



SICK
Sensor Intelligence.